

CLAIM AMENDMENTS

1-30. (canceled)

1 31. (currently amended) A chamber liner apparatus for covering a portion of a cylindrical side wall
2 of a plasma chamber, comprising:

3 a cylindrical liner having cylindrical inner and outer surfaces;

4 wherein the outer surface of the liner includes a recess;

5 wherein the [liner] recess includes an aperture extending between said inner and outer
6 surfaces; and

7 ~~wherein the outer surface of the liner includes a recess contiguous with the aperture; and~~

8 wherein the recess includes a portion adjoining the aperture that does not extend through the
9 liner to the inner surface of the liner.

1 32. (currently amended) Apparatus according to claim 31, wherein:

2 the aperture and said portion of the recess are each characterized by a respective
3 circumferential width dimension along the circumference of the liner; and

4 said portion of the recess has a circumferential width equal to or greater than the
5 circumferential width of the aperture.

1 33. (currently amended) Apparatus according to claim 31, wherein said portion of the recess extends
2 from the aperture to one end of the cylindrical liner.

1 34. (currently amended) Apparatus according to claim 31, wherein:

2 said portion of the recess extends from the aperture to one end of the cylindrical liner;

3 the aperture and said portion of the recess are each characterized by a respective
4 circumferential width dimension along the circumference of the liner; and

5 said portion of the recess has a circumferential width equal to or greater than the
6 circumferential width of the aperture.

1 35. (previously presented) Apparatus according to claim 31, wherein:

2 the cylindrical liner is characterized by a longitudinal axis;

3 the aperture has an axial height dimension parallel to said longitudinal axis and a
4 circumferential width dimension along the circumference of the liner; and

5 the circumferential width of the aperture is much larger than the axial height of the aperture.

1 36. (currently amended) Apparatus according to claim 31, further comprising:

2 an arcuate door having a radially inner surface dimensioned so as to permit the radially inner
3 surface of the door to move between a first position at which the radially inner surface of the door
4 covers the aperture and a second position at which the entire radially inner surface of the door is
5 within said portion of the recess.

1 37. (currently amended) Apparatus according to claim 31, wherein:

2 the cylindrical liner is characterized by first and second ends and a longitudinal axis;

3 the aperture has first and second opposite sides respectively facing the first and second ends
4 of the liner;

5 said portion of the recess adjoining the aperture includes first and second portions
6 respectively ~~adjacent to~~ adjoining the first and second sides of the aperture;

7 the radially outer surface of the first portion of the recess is beveled so that its radial distance
8 from the longitudinal axis of the liner decreases progressively from adjacent the aperture toward the
9 first end of the liner; and

10 the radially outer surface of the second portion of the recess is beveled so that its radial
11 distance from the longitudinal axis of the liner increases progressively from adjacent the aperture
12 toward the second end of the liner.

1 38. (previously presented) Apparatus according to claim 37, wherein:

2 the first portion of the recess has a minimum radial distance from the longitudinal axis of the
3 liner that is substantially less than the maximum radial distance of the second portion of the recess
4 from the longitudinal axis of the liner.

1 39. (currently amended) Apparatus according to claim 37, further comprising:
2 an arcuate door having a radially inner surface extending between a first end and a second
3 end of the door;
4 wherein the radially inner surface of the door adjacent the first end is beveled so as to be
5 congruent with the radially outer surface of the first portion of said portion of the recess; and
6 wherein the radially inner surface of the door adjacent the second end is beveled so as to be
7 congruent with the radially outer surface of the second portion of said portion of the recess.

40. (canceled)

1 41. (currently amended) Apparatus according to claim ~~40~~ 42, wherein:
2 the radially outer surface of the first portion of the liner has a minimum radial distance from
3 the longitudinal axis of the liner that is substantially less than the maximum radial distance of the
4 radially outer surface of the second portion of the liner from the longitudinal axis of the liner.

1 42. (currently amended) ~~Apparatus according to claim 40, further~~ A chamber liner apparatus for
2 covering a portion of a cylindrical side wall of a plasma chamber, comprising:
3 a cylindrical liner characterized by first and second ends, a longitudinal axis, a radially inner
4 surface, and a radially outer surface; and
5 an arcuate door having a radially inner surface extending between a first end and a second
6 end;
7 wherein the liner includes an aperture extending between the radially inner and outer surfaces
8 of the liner, the aperture having first and second opposite sides respectively facing the first and
9 second ends of the liner, and the liner having first and second portions respectively adjacent to the
10 first and second sides of the aperture;
11 wherein the radially outer surface of the first portion of the liner is beveled so that its radial
12 distance from the longitudinal axis of the liner decreases progressively from adjacent the aperture
13 toward the first end of the liner; and
14 the radially outer surface of the second portion of the liner is beveled so that its radial
15 distance from the longitudinal axis of the liner increases progressively from adjacent the aperture
16 toward the second end of the liner;
17 wherein the first end of the radially inner surface of the door is beveled so as to be congruent

18 with the radially outer surface of the first portion of the liner; and
19 wherein the second end of the radially inner surface of the door is beveled so as to be
20 congruent with the radially outer surface of the second portion of the liner.

43-44. (canceled)

1 45. (currently amended) Apparatus according to claim 31, wherein:
2 the cylindrical liner is characterized by a longitudinal axis;
3 the cylindrical liner comprises first and second ends at opposite ends of the longitudinal axis
4 of the cylindrical liner;
5 the aperture has first and second opposite sides respectively facing the first and second ends
6 of the cylindrical liner; and
7 said portion of the recess includes first and second portions respectively contiguous with the
8 first and second sides of the aperture.

1 46. (currently amended) Apparatus according to claim 31, wherein:
2 the cylindrical liner is characterized by a longitudinal axis;
3 the cylindrical liner comprises first and second ends at opposite ends of the longitudinal axis
4 of the cylindrical liner;
5 the aperture has first and second opposite sides respectively facing the first and second ends
6 of the cylindrical liner; and
7 said portion of the recess is contiguous with the entire first side of the aperture.

1 47. (currently amended) Apparatus according to claim 46, wherein:
2 said portion of the recess extends from the first side of the aperture to the first end of the
3 cylindrical liner.

1 48. (currently amended) Apparatus according to claim 46, wherein:
2 the aperture and said portion of the recess are respectively characterized by a respective
3 circumferential width dimension along the circumference of the liner; and
4 said portion of the recess has a circumferential width equal to or greater than the
5 circumferential width of the aperture.